RD 122023

REMARKS:

Claims 1-50 were presented in the application as filed on 26 November 2002. In an Office action dated October 3,2005, restriction to a single invention was required. The Groups containing the two inventions were defined as

- I. Claims 1-7, 12-18, 22-27, 35, 37 and 39
- IL Claims 8-11, 19-21, 28-34, 36, 38 and 40-50

The claims of Group I were elected in a response dated 5 November 2005. Accordingly, claims 8-11, 19-21, 28-34, 36, 38 and 40-50 are withdrawn, and claims 1-7, 12-18, 22-27, 35, 37 and 39 are currently under consideration.

Objections

The abstract is objected to because the abstract has two pages (page 28 and 29). Page 29, containing the word "Figures," is now deleted, as suggested in the Office action. It is believed that the objection is hereby overcome.

Rejections Under 35 USC §112

Claims 2-7 and 15-17 are rejected under 35 USC §112 as being indefinite. The Office action states that claim 2 is indefinite, because it depends from itself, and suggests that claims 3-7 are indefinite because they depend from claim 2. Claims 2-7 are now amended to depend from claim 1. It is believed that the rejection is hereby overcome.

Rejections Under 35 USC §102

Claims 1-3 are rejected under 35 USC §102(e) as being anticipated by US 2003/0005955 to Shiotsuka. The rejection is traversed.

Shiotsuka relates to photovoltaic elements having first and second electrodes 105a and 105b and transparent electrode 104 (Abstract, FIG. 1, paragraph 0050). The Office action suggests that transparent electrode 104 corresponds to the first layer of the claims and first and/or second electrode 105a and 105b correspond to the elongated members of the claims.

Claim 1 is now amended to limit the composition of the first layer of the first electrically conducting material to "K, Li, Na, Mg, La, Ce, Ca, Ba, Ag, In, Sn, Zn, Zr, Sm, Eu, alloys thereof, and mixtures thereof". Shiotsuka is silent regarding a structure having a layer

RD 122023

of the claimed composition. Therefore, the reference does not anticipate claim 1 as amended; likewise, claims 2-7, which now depend from claim 1, are not anticipated. It is believed that the rejection is hereby overcome.

Claims 1, 12, 14, 22 and 26 are rejected under 35 USC §102(b) as being anticipated by JP 10-255982 (JP '982). The rejection is traversed.

JP '982 relates to an organic EL element including an electrode 12, backing electrode 16 and electron injection layer 20 (Abstract). The Office action suggests that the first layer of the rejected claims reads on electrode 12 and/or backing electrode 16 and the elongated members of the rejected claims read on electron injection layer 20. Electrode 12 is composed of ITO and backing electrode 16 is composed of Au or Al (paragraph 0009).

Claims 1 and 12 are now amended to limit the composition of the first layer to "K, Li, Na, Mg, La, Ce, Ca, Ba, Ag, In, Sn, Zn, Zr, Sm, Eu, alloys thereof, and mixtures thereof." Since the reference is silent regarding a layer of the claimed composition, applicants submit that the reference does not anticipate claims 1 or 12 or claims 14, 22 or 26 which depend from claim 12. It is believed that the rejection is hereby overcome.

Claims 1, 12, 13, 22 and 26 are rejected under 35 USC §102(e) as being anticipated by US 6,949,878, to Suzuri. The rejection is traversed.

Suzuri relates to a multicolor light emission apparatus (Abstract) composed of electron injection layer 26 and cathode 27 (FIG. 7, col. 30, lines 60-67). The Office action states that the first layer of claims 1 and 12 reads on electron injection layer 26 and the elongated members read on cathode 27. Electron injection layer 26 is composed of LiF (col. 30, lines 60-62); other materials for use and an electron injection layer include Sr, Al MgF and aluminum oxide (col. 8, lines 54-62).

As noted above, claims 1 and 12 are now amended to limit the composition of the first layer to "K, Li, Na, Mg, La, Ce, Ca, Ba, Ag, In, Sn, Zn, Zr, Sm, Eu, alloys thereof, and mixtures thereof." Since the reference is silent regarding a layer of the claimed composition, applicants submit that the reference does not anticipate claims 1 or 12 or claims 13, 22 or 26, which depend from claim 12. It is believed that the rejection is hereby overcome.

RD 122023

Rejections Under 35 USC §103

Claims 1-7 are rejected under 35 USC §103(a) as being obvious over US 2003/0005955 to Shiotsuka. Claims 1-7, 12-18, 35 and 39 are rejected under 35 USC §103(a) as being obvious over US 2003/0005955 to Shiotsuka, in view of US 5, 331,183, to Sacrifici. Claims 1, 12, 14-18, 22 and 26 are rejected under 35 USC §103(a) as being obvious over JP 10-255982. Claims 1-7, 12-18, 22-27 and 37 are rejected under 35 USC §103(a) as being US 6,949,878, to Suzuri. The rejections are traversed.

The deficiencies of US 2003/0005955 to Shiotsuka, US 2003/0005955 to Shiotsuka, JP 10-255982, and US 6,949,878, to Suzuri are discussed above. Briefly, none of the references teaches or suggests a structure as set forth in independent claims 1, 12, 27, 37 and 39, as now amended, and their dependent claims. Regarding the secondary reference combined with Shiotsuka in rejecting claims 1-7, 12-18, 35 and 39, Sacrifici relates to diodes fabricated from semiconducting polymers and acceptors (Abstract). There is no mention of an electrode having the claimed composition, and so Sacrifici cannot supply the deficiency of Shiotsuka. Therefore, applicants submit the claims as now amended are not obvious over the cited references. It is believed that the rejection is hereby overcome.

In view of the above Amendments and Remarks, it is believed that claims 1-7, 12-18, 22-27, 35, 37 and 39 are patentable. Accordingly, Applicants respectfully request allowance of all claims under consideration herein.

Respectfully submitted,

Mary Louise Gioeni
Attorney for Applicants

Reg. No.: 41,779

Dated: April 10, 2006

General Electric Company GE Global Research 1 Research Circle Niskayuna, NY 12309 Phone (518) 387-6648 Fax (518) 387-7751